

## ABSTRACT

This invention relates to a method for identifying compounds that specifically inhibit a metabolic target site or pathway in plants. Enzymes which are specifically affected by the method of the invention include plant pyrimidine biosynthetic pathway enzymes, and particularly the enzymes involved in the conversion of orotate to uridine-5'-monophosphate (UMP). Further, the invention relates to a method for control of undesirable monocotyledenous and dicotyledenous plant species.